

REMARKS

This Application has been carefully reviewed in light of the Official Action mailed July 27, 1998. In order to advance prosecution of this case, Applicants have amended Claims 38, 45, 48, 49, 51, 65, 66, 70, 71, and 72 in order to further describe the inventive concept. Applicants make no admission that these amendments were made as a result of any prior art. Applicants respectfully request reconsideration and favorable action in this case.

Objection to the Drawings

The Examiner objects to the drawings stating that "the drawings must show every feature of the invention specified in the claims." According to the Examiner, "the subject matter of claim(s) 48, 49, & 74 in regard to the claimed report must be shown in the drawings as required by 37 C.F.R. § 1.83(a) or the feature(s) canceled from the claims" To correct the problem, the Examiner suggests that the Applicants submit a proposed drawing correction.

Applicants enclose an amended drawing of FIGURE 9 which includes the claimed report in Claims 48, 49, and 74. Applicants also amend the specification to make reference to "report 103" in amended FIGURE 9. No new matter has been added. It is respectfully requested that the Examiner approve the changes to FIGURE 9 of the formal drawings indicated in red on the attached sheet. A Letter to the Official Draftsman with attached formal drawing of FIGURE 9, as amended, to replace the originally submitted formal drawing of FIGURE 9 is being filed simultaneously with this Amendment. Accordingly, Applicants request the Examiner to withdraw his objection to the drawings.

Section 112 Rejection

The Examiner rejects Claims 51-57 under 35 U.S.C. § 112, second paragraph. According to the Examiner, Claims 51-57 are "indefinite for failing to point out and distinctly

claim the subject matter" that the Applicants regard as their invention. In particular, the Examiner states "it is unclear how a transmission of data may be received when the data has never been transmitted."

Applicants amend Claim 51 to include "initiating transmission of the position fixes and the odometer readings based on a configurable condition." Therefore, Applicants respectfully request the Examiner to withdraw the rejection of Claim 51 and its dependents under 35 U.S.C. § 112, second paragraph.

Section 103 Rejections

The Examiner rejects Claims 38-79 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,359,528 issued to Haendel, et al. ("*Haendel*") in view of U.S. Patent No. 5,396,540 issued to Gooch ("*Gooch*"). In order to make Applicants' claimed invention obvious, *Haendel* and *Gooch* must be analogous art, and there must be a suggestion or motivation to combine them. Further, the combined analogous art must teach or suggest all claimed features. Applicants respectfully submit that the references cited do not satisfy these criteria and, thus, do not make Applicants' claimed invention obvious. For these reasons, Applicants respectfully request reconsideration of the § 103 rejection of Claims 38-79.

Haendel discloses a system and method for gathering vehicle position and odometer readings that will allow state taxing authorities to compute the mileage driven by the vehicle in the state. To accomplish this, the vehicle is equipped with a GPS receiver, an odometer, a memory device containing state boundary information, and a processor. The system operates by recording the time, odometer mileage, and vehicle position when the vehicle first enters a state. From each position determination, the processor determines whether the vehicle has entered a new state by comparing the current position against the boundaries stored in the memory device. If the vehicle has not entered a new state, the processor

discards the measurement. But if the vehicle has entered a new state, the processor records the time, odometer mileage, and vehicle position. Significantly, the system in *Haendel* only stores a single measurement per state boundary crossing on the truck, and the system only downloads the measurements when the vehicle returns to its home base. Note, *Haendel* does not teach or suggest how to compute the applicable tax or how a state taxing authority downloads the stored information or computes the mileage with the downloaded information. Also, *Haendel* fails to teach or suggest any additional processing of the single measurement per state crossing to refine or proportion mileage between states.

Gooch discloses a system and method for determining the minimum cost routing of a cellular telephone call to be placed between a remote vehicle and a control center. To accomplish this, the remote vehicle is equipped with a cellular telephone, a satellite data communications system, and a position signal receiver. The system only operates when someone wants to make a call. If someone at the control center wants to make a call, the control center first sends a signal over a satellite link requesting the vehicle to report its current position. The vehicle then determines its position using the position signal receiver and transmits the position back over the satellite link to the control center. At the control center, a computer with a database containing the boundaries of cellular telephone service areas determines in which cellular telephone service area the vehicle is currently located and routes the cellular telephone call to the vehicle. Alternatively, the vehicle operator may send a request over the satellite data communications system to the control center, which will then follow the procedures just explained as if someone at the control center wanted to initiate the call. Significantly, the system in *Gooch* only makes and sends a position determination in response to user initiation of a call.

Applicants respectfully submit that Claims 38-44 are not obvious in view of the limited teachings of *Haendel* and *Gooch*. Claim 38, from which Claims 39-44 depend, recites, as amended:

38. A system for determining a tax for a vehicle, comprising:

 a mobile unit coupled to a vehicle, the mobile unit comprising:

 a positioning device operable to determine a plurality of position fixes along a route traveled by the vehicle;

 an odometer operable to generate a plurality of odometer readings; and

 a communications device operable to initiate transmission of the position fixes and the odometer readings based on a configurable condition;

 a communications link coupled to the mobile unit, the communications link operable to receive the position fixes and the odometer readings from the mobile unit; and

 a remote location coupled to the communications link, the remote location operable to receive the position fixes and the odometer readings determined by the mobile unit using the communications link, the remote location further operable to determine a tax for the vehicle in a plurality of taxing regions in response to the position fixes and the odometer readings.

Initially, Applicants submit that the Examiner's obviousness rejection based partly on *Gooch* is erroneous, in that *Gooch* should not be cited as a reference for the recited invention because it is not analogous art. According to M.P.E.P. § 2141.01(a), citing *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992), in order for an examiner to rely on a reference as a basis for rejection, "the reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." Applicants submit that *Gooch* does not satisfy either branch of the analogous art requirement.

First, *Gooch* should not be cited as analogous art because it is not in the field of the Applicants' endeavor. *Gooch* teaches performing a position determination at a remote vehicle, transmitting the position to a control center, and

associating the position with a cellular service area when someone desires to make a cellular call between the control center and the remote vehicle. These steps are performed to compute the minimum cost cellular telephone routing. On the other hand, Applicants' recited invention discloses a system operable to "determine a plurality of position fixes," "generate a plurality of odometer readings," and "initiate transmission of the position fixes and the odometer readings based on a configurable condition." The system performs these functions to "determine a tax for the vehicle in a plurality of taxing regions in response to the position fixes and the odometer readings." Thus, *Gooch* relates to providing cellular telephone service between a remote vehicle and a control center, and Applicants' recited invention relates to "determining a tax for a vehicle." Accord, In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992) (analyzing the use made of the inventions to determine the fields of endeavor). Therefore, *Gooch* is not in the same field of endeavor as Applicants' recited invention.

Second, *Gooch* is not reasonably pertinent to the particular problem with which the Applicants were concerned. According to M.P.E.P. § 2141.01(a), citing In re Clay, 966 F.2d at 659, "[a] reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." In analyzing whether a reference is reasonably pertinent, it is important to consider the purpose of both the recited invention and the reference. In re Clay, 966 F.2d at 659.

Analyzing the matter and the purpose of *Gooch* and Applicants' recited invention shows *Gooch* would not be reasonably pertinent to the Applicants' problem. *Gooch* performs a position determination at a remote vehicle, transmits the position to the control center, and associates the position with a cellular service area. These functions

are necessary and, therefore, performed only when someone desires to make a cellular call between the control center and the remote vehicle. Thus, *Gooch*'s only communication technique suggested to one of skill in the art is to perform communications upon user initiation. The system performs these functions for the purpose of computing the minimum cost cellular telephone routing.

Applicants' claim language expresses the dramatic difference in the principles of operation between *Gooch* and Applicants' recited invention as it calls for a system operable to "determine a plurality of position fixes along a route traveled by the vehicle," "generate a plurality of odometer readings," and "initiate transmission of the position fixes and the odometer readings based on a configurable condition." The purpose of these functions is "to determine a tax for the vehicle in a plurality of taxing regions."

Thus, *Gooch* calls for different determinations, transmissions, and associations and pursues a different purpose - minimum cost cellular routing versus "determining a tax for a vehicle" - than Applicants' recited invention. One skilled in the art would not have expected to solve the problem of "determining a tax for a vehicle in a plurality of taxing regions" by reviewing a system designed to determine the minimum cost cellular telephone routing based only upon a user-initiated request. Hence, *Gooch* is not a reference that would have been logically desirable to the Applicants and is not reasonably pertinent.

In sum, Applicants submit that *Gooch* is not in the field of their endeavor and is not reasonably pertinent to the problem with which they were concerned. Consequently, Applicants submit that *Gooch* is not analogous art, making an obviousness rejection based in part on *Gooch* erroneous.

Moreover, even if *Gooch* is an analogous reference - which Applicants respectfully traverse - Claim 38 is not rendered obvious in view of *Gooch* and *Haendel*. According to M.P.E.P. § 2143.03, all claim limitations must be taught or suggested by

the references to establish prima facie obviousness. Therefore, if there exists at least one claim limitation that the combination of *Gooch* and *Haendel* does not teach or suggest, an obviousness rejection based on those references is erroneous. Applicants submit that *Gooch* and *Haendel* together do not teach or suggest all limitations of the Applicants' invention recited in Claim 38.

For example, neither reference teaches or suggests "a communications device operable to initiate transmission of the position fixes and the odometer readings based on a configurable condition." *Haendel* teaches or suggests nothing of the kind. *Haendel* simply stores the position and odometer information on the vehicle for later download at the vehicle's home base. This fails to teach or suggest any kind of "a communications device", much less one "operable to initiate transmission of the position fixes and the odometer readings based on a configurable condition." On the other hand, while *Gooch* does teach the transmission of a position fix from a remote vehicle over a communication link, it does not teach or even remotely suggest "a communications device operable to initiate transmission of the position fixes" or "a communications device operable to initiate transmission of ... odometer readings." Moreover, there is no teaching or suggestion of transmitting "based on a configurable condition." *Gooch* only transmits one position fix and that transmission is only performed in response to a human-initiated request. Thus, the references do not teach or suggest this limitation.

Also, neither reference teaches or suggests "a remote location coupled to the communications link, the remote location operable to receive the position fixes and the odometer readings determined by the mobile unit using the communications link." While *Gooch* does teach a remote location coupled to a communications link and operable to receive a position fix, it does not teach or suggest a remote location "operable to receive ... position fixes and ...

odometer readings ... using the communications link." For its part, *Haendel* discloses no "communications device" or "communications link." The apparatus in *Haendel* only downloads the recorded data when the vehicle returns to its home base. Thus, *Haendel* does not teach a "remote location operable to receive the position fixes and the odometer readings determined by the mobile unit using the communications link." Therefore, the references fail to teach this limitation.

Further, neither reference teaches or suggests "a remote location coupled to the communications link, ..., the remote location further operable to determine a tax for the vehicle in a plurality of taxing regions in response to the position fixes and the odometer readings." *Gooch* does not teach or even remotely suggest a remote location "operable to determine a tax for the vehicle in a plurality of taxing regions in response to the position fixes and odometer readings." It is only concerned with minimum cost cellular telephone routing. For its part, *Haendel* discloses no centralized location for computing taxes for more than one taxing region. Thus, *Haendel* fails to teach or suggest a "remote location further operable to determine a tax for the vehicle in a plurality of taxing regions in response to the position fixes and the odometer readings." Therefore, the references fail to teach this limitation.

For all of these reasons, Applicants respectfully submit that Claim 38 is not obvious even if the Examiner combines *Gooch* with *Haendel* because the combination does not teach or suggest every limitation in Claim 38. Therefore, Applicants respectfully request reconsideration of the \$ 103 rejection of Claim 38 in view of *Haendel* and *Gooch*.

Claims 39-44 depend on Claim 38, shown above to be allowable, and contain additional limitations neither taught nor suggested by the combination of *Gooch* and *Haendel*.

For example, Claim 41 recites:

41. The system of Claim 38, wherein the remote location comprises:

a memory operable to store geographical information that specifies a plurality of taxing regions; and

a processor coupled to the memory and operable to associate each position fix to a corresponding taxing region, the processor further operable to determine distance traveled in the corresponding taxing region using the odometer readings.

Neither reference, nor their combination, teaches or suggests a remote location comprising "a memory operable to store geographical information that specifies a plurality of taxing regions." Further, neither reference teaches or suggests a remote location having "a processor coupled to the memory and operable to associate each position fix to a corresponding taxing region." *Gooch* only associates a position fix with a cellular telephone service area, and *Haendel* only performs position associations on the vehicle. Thus, the combination of *Gooch* and *Haendel* does not teach the limitations suggested in Claim 41.

Claim 42 depends on Claim 38 and recites "wherein the processor is further operable to credit a proportionate amount of a mileage traveled by the vehicle to a first taxing region associated with a first position fix and a second taxing region associated with a successive second position fix." Neither reference teaches or suggests this limitation. *Gooch* does not even contemplate calculating mileage traveled. *Haendel* only records a single measurement at a boundary crossing (step 206) making it impossible to proportion mileage between two different regions, as recited in Claim 42. Thus, *Haendel* disregards any errors in proportioning mileage at the boundaries. Therefore, the combination of *Gooch* and *Haendel* fails to teach or suggest the limitations in Claim 42.

For these reasons, and for the reasons stated with respect to Claim 38, Applicants request reconsideration of the \$ 103 rejection of Claims 39-44.

Independent Claim 45, as amended, recites:

45. An apparatus on a vehicle for transmitting information to a remote location for purposes of tax determination, comprising:

a positioning device operable to determine a plurality of position fixes along a route traveled by a vehicle;

an odometer operable to generate a plurality of odometer readings; and

a transmitter coupled to the positioning device and the odometer, the transmitter operable to initiate transmission of the position fixes and the odometer readings to the remote location based on a configurable condition for purposes of tax determination.

Neither *Haendel* nor *Gooch*, nor their combination, suggests a "transmitter operable to initiate transmission of the position fixes and the odometer readings to the remote location based on a configurable condition for purposes of tax determination." For this reason, and for the reasons stated above with respect to Claim 38, Applicants respectfully request reconsideration of the § 103 rejection of Claim 45.

Claims 46-50 depend on Claim 45, shown above to be allowable, and contain additional limitations neither taught nor suggested by the combination of *Gooch* and *Haendel*. For example, Claim 49 recites "the report includes position fixes and odometer readings accumulated over a predetermined reporting interval specified by the configurable condition." *Gooch* performs no onboard processing and downloads each position fix after receiving the user-initiated request, and any reports *Haendel* generates would be based on the interval between downloads at the home base, not "specified by the configurable condition." Thus, the combination fails to teach all of the limitations recited in Claim 49. For this reason, and for the reasons stated with respect to Claim 38, Applicants request reconsideration of the § 103 rejection of Claims 46-50.

Independent Claim 51, as amended, recites:

51. A method for determining distances traveled by a vehicle in a plurality of taxing regions, comprising:
determining a plurality of position fixes for a vehicle;
determining a plurality of odometer readings for the vehicle;
initiating transmission of the position fixes and the odometer readings based on a configurable condition;
receiving the position fixes and odometer readings at a remote location;
storing geographic information at the remote location specifying a plurality of taxing regions;
associating at the remote location each position fix with one of the taxing regions; and
determining at the remote location a distance traveled by the vehicle in each taxing region using the odometer readings.

Neither *Gooch* nor *Haendel*, nor their combination, suggests "initiating transmission of the position fixes and the odometer readings based on a configurable condition." Further, neither *Gooch* nor *Haendel*, nor their combination, suggests "associating at the remote location each position fix with one of the taxing regions" or "determining at the remote location a distance traveled by the vehicle in each taxing region using the odometer readings." For these reasons and the reasons stated above with respect to Claims 38-44, Applicants respectfully request reconsideration of the § 103 rejection of Claim 51.

In addition, Claims 52-57 depend on Claim 51, shown above to be allowable, and contain additional limitations neither taught nor suggested by the combination of *Gooch* and *Haendel*. For example, Claim 53 recites "crediting a proportionate amount of a mileage traveled by the vehicle to the first and second taxing regions." *Gooch* teaches or suggests no type of mileage determinations, and *Haendel* only records a single measurement at a boundary crossing, making it impossible to proportion mileage between two different regions. For this reason and the reasons stated above with respect to Claims 38-44, Applicants respectfully request the Examiner to reconsider the § 103 rejection of Claims 52-57.

Independent Claim 58 recites:

58. A method of determining distances traveled by a vehicle in a plurality of taxing regions, comprising:
 storing geographic information specifying a plurality of taxing regions;
 determining a first position fix and a successive second position fix;
 determining a mileage between the first and second position fixes;
 associating the first position fix with a first taxing region and the second position fix with a second taxing region; and
 determining a proportionate amount of the mileage traveled in the first and second taxing regions.

Neither *Haendel* nor *Gooch*, nor their combination, suggests "determining a proportionate amount of the mileage traveled in the first and second taxing regions." For this reason and the reasons stated above with respect to Claims 38-44, Applicants respectfully request the Examiner to reconsider the \$ 103 rejection of Claim 58.

Claims 59-64 depend on Claim 58, shown above to be allowable, and contain additional limitations neither taught nor suggested by the combination of *Gooch* and *Haendel*. For example, Claim 62 recites "wherein at least the steps of associating and determining a proportionate amount of the mileage traveled are performed at a location remote from the vehicle." *Gooch* performs no such associations and performs no such determinations. *Haendel* only performs such associations on the vehicle and performs no such determinations. Thus, the references do not teach the limitations in Claim 62. As another example, Claim 63 recites that "all steps are performed on the vehicle." *Gooch* does not teach or suggest any type of onboard processing. While *Haendel* does suggest a processor operable to associate position fixes with a taxing region (although providing no details of how this is done), *Haendel* performs no further computations other than to store a single qualified position determination in memory when a state boundary is crossed. Thus, the combination fails to teach all of the limitations in Claim 63. For this reason, and for the reasons stated with respect to Claims 38-44,

Applicants request reconsideration of the § 103 rejection of Claims 59-64.

Independent Claim 65 recites:

65. An apparatus on a vehicle for determining distances traveled by the vehicle in a plurality of taxing regions, comprising:

a positioning device operable to determine a first position fix and a second position fix along a route traveled by the vehicle;

a memory operable to store geographic information specifying a plurality of taxing regions; and

a processor coupled to the positioning device and the memory, the processor operable to receive the first position fix and the second position fix from the positioning device, the processor further operable to associate the first position fix with a first taxing region and the second position fix with a second taxing region, the processor further operable to proportion a mileage traveled between the first and second position fixes to the first and second taxing regions.

Neither *Haendel* nor *Gooch*, nor their combination, suggests a "processor ... operable to proportion a mileage traveled between the first and second position fixes to the first and second taxing regions." Further, the references, alone or in combination, do not teach or remotely suggest "an apparatus on a vehicle for determining distances traveled by the vehicle in a plurality of taxing regions." Neither *Gooch* nor *Haendel* performs any kind of onboard mileage computations. For these reasons, and for the reasons stated above with respect to Claims 38-44, Applicants respectfully request the Examiner to reconsider the § 103 rejection of Claim 65.

In addition, Claims 66-71 depend on Claim 65, shown above to be allowable, and contain additional limitations neither taught nor suggested by the combination of *Gooch* and *Haendel*. For example, Claim 71 recites "a transmitter coupled to the processor and operable to communicate the proportioned mileage to a remote location." *Haendel* neither teaches nor suggests any type of transmitter, much less one "operable to communicate ... mileage....," and the transmitter in *Gooch*

only transmits a position determination for calculating minimum cost cellular telephone routings. For this reason and the reasons stated with respect to Claims 38-44, Applicants request reconsideration of the \$ 103 rejection of Claims 66-71.

Independent Claim 72, as amended, recites:

72. An apparatus remotely located from a vehicle for determining distances traveled by the vehicle in a plurality of taxing regions, comprising:

a communications device coupled to a communications link and operable to receive a plurality of position fixes and a plurality of odometer readings for a vehicle;

a memory operable to store geographical information that specifies a plurality of taxing regions; and

a central controller coupled to the communications device and the memory, the central controller operable to associate each position fix to a corresponding taxing region, the central controller further operable to determine distance traveled in the corresponding taxing regions using the odometer readings.

Neither *Gooch* nor *Haendel*, nor their combination, teaches or suggests "a communications device coupled to a communications link and operable to receive a plurality of position fixes and a plurality of odometer readings for a vehicle." Further, neither *Haendel* nor *Gooch*, nor their combination, suggests "a memory operable to store geographical information that specifies a plurality of taxing regions" which is "remotely located from a vehicle." Moreover, the references, alone or in combination, do not teach or suggest "a central controller coupled to the communications device and the memory, the central controller operable to associate each position fix to a corresponding taxing region, the central controller further operable to determine distance traveled in the corresponding taxing regions using the odometer readings." For these reasons and the reasons stated above with respect to Claims 38-44, Applicants respectfully request the Examiner to reconsider the \$ 103 rejection of Claim 72.

Additionally, Claims 73-79, which depend on Claim 72, shown above to be allowable, contain additional limitations neither taught nor suggested by the combination of *Gooch* and *Haendel*.

For example, Claim 74 recites "the communications device receives a compiled report representing position fixes and odometer readings accumulated over a predetermined reporting interval." *Haendel* discloses no communications device, much less one operable to receive "a compiled report representing ... a predetermined reporting interval." *Gooch* discloses a communications device, but only one operable to receive a position fix in response to a user-initiated request. Thus, the combination of *Haendel* and *Gooch* fails to suggest all of the limitations in Claim 74.

As another example, Claim 77 recites "the central controller is further operable to determine a proportionate amount of a mileage traveled by the vehicle in a first region associated with a first position fix and a second region associated with a successive second position fix." *Gooch* is not at all concerned with vehicular mileage, and the fact that *Haendel* only records a single position fix and odometer reading after each state boundary crossing prevents it from accomplishing such a task. Thus, the combination of *Gooch* and *Haendel* does not teach or suggest this limitation either.

For these reasons and the reasons stated above with respect to Claims 38-44 and 48, Applicants respectfully request the Examiner to reconsider the § 103 rejection of Claims 73-79.

Double Patenting Rejection

The Examiner rejects Claims 38-79 under the judicially created doctrine of double patenting over Claims 1-45 of U.S. Patent No. 5,694,322 because, if allowed, the claims would improperly extend the right to exclude granted in the patent. Applicants traverse this rejection. However, to advance prosecution of this Application, Applicants have prepared and

submit for filing with this Amendment a Terminal Disclaimer to Obviate a Double Patenting Rejection (37 C.F.R. § 1.321(c)) and Certificate Under 37 C.F.R. § 3.73(b). Therefore, Applicants respectfully request the Examiner withdraw the rejection of Claims 38-79 under the judicially created doctrine of double patenting.

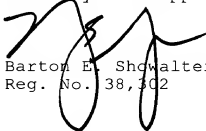
Conclusions

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicants stands ready to conduct such a conference at the convenience of the Examiner.

The Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker & Botts, L.L.P.

Respectfully submitted,

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